

California Energy Commission
STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 2 for a Project With Location Changes Awarded
Funding Through the Alternative and Renewable Fuel and
Vehicle Technology Program Under Solicitation GFO-15-603
– DC Fast Chargers for California’s Interregional Corridors

California Energy Commission
Edmund G. Brown Jr., Governor



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ADDENDUM 2

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation GFO-15-603* was posted November 10, 2016 (CEC-600-2016-008).¹ This addendum uses the same approach to assess the localized health impacts for a project with location changes. ChargePoint, Inc. has proposed 16 new replacement electric vehicle charging station locations. ChargePoint, Inc. is also proposing to combine two previously approved stations into one larger installation at a new location. The newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators.² (See Appendix A.) Charger quantity and type for the new locations are identical to the original proposal, with the exception of the newly proposed Mojave combined location.

Table 1: Original and New Site Locations for ChargePoint, Inc., Along With Environmental Justice Indicators

Original Site Locations	New Site Locations	EJ Indicator(s)
1611 E Main Street Barstow, CA 92311	2974 Lenwood Road Barstow, CA 92311	Poverty, Minority, and Age
40873 Sunrise Canyon Road Yermo, CA 92398	36017 Calico Road Yermo, CA 92398	Poverty
72363 Baker Boulevard Baker, CA 92309	72922 Baker Boulevard Baker, CA 92309	Poverty, Minority, and Age
65845 Cima Road Nipton, CA 92364	66150 Rasor Road Baker, CA 92309	Poverty, Minority, and Age
1355 S Main Street Willits, CA 95490	711 E Perkins Street Ukiah, CA 95482	Poverty and Unemployment

1 Brecht, Patrick, 2016. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2016-008.

2 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.8 percent (2012-2016), (iii.) city's unemployment rate exceeds California's unemployment rate of 4.3 percent as of December 2017, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

Original Site Locations	New Site Locations	EJ Indicator(s)
115 E 2 nd Street Cloverdale, CA 95425	1139 S Cloverdale Boulevard Cloverdale, CA 95425	Minority
400 S Canyon Way Colfax, CA 95713	1516 S Canyon Way Colfax, CA 95713	Unemployment
25 Canyon Creek Road Dutch Flat, CA 95714	21719 Donner Pass Road Soda Springs, CA 95728	Age
15668 Sierra Highway Mojave, CA 93501	16262 Sierra Highway Mojave, CA 93501	Poverty, Unemployment, Minority, and Age
15900 Sierra Highway Mojave, CA 93501		
2301 W Lancaster Boulevard Lancaster, CA 93536	39440 10 th Street W Palmdale, CA 93551	Poverty, Unemployment, and Minority
5037 E Brundage Lane Bakersfield, CA 93307	1631 Comanche Drive Bakersfield, CA 93307	Poverty, Minority, and Age
500 Steuber Road Tehachapi, CA 93561	9000 Magellan Drive Tehachapi, CA 93561	Poverty, Unemployment, and Minority
140 S 15 th Street Chowchilla, CA 93610	309 Prosperity Boulevard Chowchilla, CA 93610	Poverty, Unemployment, and Minority
10040 CA-120 Oakdale, CA 95361	200 N 3 rd Avenue Oakdale, CA 95361	Poverty and Unemployment
40530 CA-41 Oakhurst, CA 93644	40179 Enterprise Drive Oakhurst, CA 93644	Poverty and Unemployment
3010 West Grant Line Road Tracy, CA 95304	2800 Naglee Road Tracy, CA 95304	Unemployment and Minority

Source: California Energy Commission staff

Air Quality and EJ Indicators

The newly proposed station locations (electric vehicle charging stations) are all in nonattainment zones for ozone, particulate matter (PM³) 2.5, and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method.⁴ According to staff's assessment, Baker, Bakersfield, Barstow, Chowchilla, Mojave, Oakdale, Oakhurst, Tehachapi, Tracy, and Ukiah are all considered high-risk communities.

Table 2: Environmental Justice (EJ) Indicators Compared With California

The yellow highlighted area indicates numbers (%) that meet the definition for EJ indicators
An asterisk may signify a default to county demographics and/or labor information.

	Below Poverty Level (2012-2016)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (December 2017)
California	15.8%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	4.3%
EJ Indicator Threshold	>15.8%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>4.3%
Baker*	22.2%	0.1%	1.0%	1.3%	66.8%	11.4%	1.3%	3.9%
Bakersfield	19.7%	8.2%	1.5%	6.2%	45.5%	9.0%	8.4%	7.7%
Barstow	36.7%	14.6%	2.1%	3.2%	42.8%	9.2%	10.7%	3.7%
Chowchilla	31.4%	12.6%	2.0%	0.9%	37.8%	5.4%	2.8%	7.6%
Cloverdale	5.4%	0.6%	1.8%	1.1%	32.8%	6.6%	7.0%	2.4%
Colfax	12.9%	0.2%	1.3%	1.5%	9.1%	7.4%	11.4%	6.1%
Mojave	33.6%	15.1%	1.3%	1.3%	37.6%	10.0%	10.4%	14.3%
Oakdale	16.1%	0.8%	1.0%	2.2%	26.1%	7.5%	5.0%	5.4%

3 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

4 California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

	Below Poverty Level (2012-2016)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (December 2017)
Oakhurst	17.8%	0.8%	2.2%	1.6%	16.7%	5.2%	11.0%	10.0%
Palmdale	20.6%	14.8%	0.9%	4.3%	54.4%	8.3%	2.8%	5.6%
Soda Springs*	0.0%	0.0%	0.5%	1.3%	3.9%	3.6%	15.0%	3.5%
Tehachapi	18.4%	9.0%	1.4%	1.7%	37.9%	5.2%	3.9%	6.5%
Tracy	8.1%	7.2%	0.9%	14.7%	36.9%	8.0%	2.9%	5.5%
Ukiah	22.8%	1.1%	3.7%	2.6%	27.7%	7.3%	5.5%	6.3%
Yermo*	32.2%	2.8%	2.1%	2.2%	25.2%	6.5%	7.0%	3.9%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000,06,00>, and http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.

Location Analysis and Community Impacts

The proposed station locations were assessed according to the original LHI. The environmental justice indicators are comparable to the original set of station locations. The charger quantity and type, along with the estimated gasoline gallons displaced, are also comparable, and the anticipated impact to the communities where the electric vehicle chargers will be located remains positive in terms of cleaner air and anticipated greenhouse gas reductions.

APPENDIX A:

Localized Health Impact Report Assessment Method

This LHI Report assesses the potential impacts to communities because of the projects proposed by the ARFVTP. This report is prepared under the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.

This LHI Report is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This LHI Report includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks.⁵

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (1) exposure to air pollution, (2) cancer risk, (3) ozone concentration, (4) frequency of high ozone days, (5) race/ethnicity, (6) poverty level, (7) home ownership, (8) median household value, (9) educational attainment, and (10) sensitive populations (populations under 5 years of age or over 65 years of age).

⁵ California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the electric vehicle charging stations are compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

Part 1:

- Communities located in nonattainment air basins for ozone, PM 2.5 or PM 10

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment, and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
 - A minority subset represents more than 30 percent of a given city's population.
 - A city's poverty level exceeds California's poverty level.
 - A city's unemployment rate exceeds California's unemployment rate.
 - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.